Final Model

Model Algorithm: Random Forest

Performance metrics: Macro Average F1-Score

Model features:

* Elevation numeric
* Aspect numeric
* Slope numeric
* Horizontal\_Distance\_To\_Hydrology numeric
* Vertical\_Distance\_To\_Hydrology numeric
* Horizontal\_Distance\_To\_Roadways numeric
* Hillshade\_9am numeric
* Hillshade\_Noon numeric
* Hillshade\_3pm numeric
* Horizontal\_Distance\_To\_Fire\_ numeric
* interact\_Hillshade\_9am3pm numeric
* interact\_Hillshade\_9amNoon numeric
* interact\_Hillshade\_3pmNoon numeric
* Euclidean\_Distance\_To\_Hydrology numeric
* PProb\_CovType1|Soil\_Type numeric
* PProb\_CovType2|Soil\_Type numeric
* PProb\_CovType3|Soil\_Type numeric
* PProb\_CovType4|Soil\_Type numeric
* PProb\_CovType5|Soil\_Type numeric
* PProb\_CovType6|Soil\_Type numeric
* PProb\_CovType7|Soil\_Type numeric
* PProb\_CovType1|Wilderness\_Area numeric
* PProb\_CovType2|Wilderness\_Area numeric
* PProb\_CovType3|Wilderness\_Area numeric
* PProb\_CovType4|Wilderness\_Area numeric
* PProb\_CovType5|Wilderness\_Area numeric
* PProb\_CovType6|Wilderness\_Area numeric
* PProb\_CovType7|Wilderness\_Area numeric

Parameters:

* criterion='entropy'
* max\_depth=19
* max\_features=6
* min\_samples\_split=6
* n\_estimators=70
* n\_jobs=-1
* random\_state=42